

# UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,220	03/29/2004	Don R. James JR.	200313892-1 3034	
22879 HEWLETT PA	7590 05/15/2007 ACKARD COMPANY		EXAMINER	
P O BOX 272400, 3404 E. HARMONY ROAD			WU, JUNCHUN	
	UAL PROPERTY ADMINISTRATION INS, CO 80527-2400		ART UNIT	PAPER NUMBER
			2191	
			MAIL DATE	DELIVERY MODE
			05/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		·				
	Application No.	Applicant(s)				
Office Action Summers	10/812,220	JAMES ET AL.				
Office Action Summary	Examiner	Art Unit				
	Junchun Wu	2191				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period was realiure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  36(a). In no event, however, may a reply be tiruly apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on 29 Ma	arch 2004.					
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This						
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-24</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-24</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) □ acce	epted or b) objected to by the	Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correcti	on is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).				
11) ☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the prior		ed in this National Stage				
application from the International Bureau	, ,,					
* See the attached detailed Office action for a list of	or the certified copies not receive	·u.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 3)  Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P					
Paper No(s)/Mail Date	6) Other:	nn caraca				

Art Unit: 2191

#### **DETAILED ACTION**

1. Claims 1-24 are pending in this application.

# Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

# 21,23-24 018

- 2. Claim 20, rejected under 35 U.S.C. 102(e) as being anticipated by Mullen et al. (US Pub. No. 20040243997 A1, hereinafter "Mullen").
- 3. Per claim 20
  - Mullen discloses

A computing device, comprising: a processor; and memory comprising an operating system and a management interface that comprises configuration information that describes the type and version of the operating system ([0019] "The computer further includes an operating system and operating system configuration settings" & see Fig. 4), the configuration information being accessible to a installer program that is configured to install new versions of the operating system ([0021] "The application/operating system (0S) configuration list provides information on the configuration settings to be copied from the current installed operating system on the computer to the file directory used by the operating system and applications being installed by the system installation package.").

Art Unit: 2191

#### 4. Per claim 21

the rejection of claim 20 is incorporated and further, Mullen discloses

The memory comprises re-writable, solid-state memory and wherein the operating system is embedded within the solid-state memory ([0019] "A service processor may include application programs to perform operations such as system monitoring and maintenance for the storage system in which the processor is embedded. " & [0031] "a computer readable medium, such as magnetic storage medium (e.g., hard disk drives, floppy disks, tape, etc.), optical storage (CD-ROMs, optical disks, etc.), volatile and non-volatile memory devices (e.g., EEPROMs, ROMs, PROMS, RAMS, DRAMS, SRAMs, firmware, programmable logic, etc.)" & reference to claim 4 of Mullen's invention).

Page 3

#### 5. Per claim 23

the rejection of claim 20 is incorporated and further, Mullen discloses an installer program that is configured to install new versions of the operating system ([0021] "The installation program comprises the code that performs the installation operations to install the operating system version indicated in the installation version information on the computer").

#### 6. Per claim 24

• the rejection of claim 20 is incorporated and further, Mullen discloses
the computing device is a terminal computer that does not comprise a hard drive ([0019]
"The computer 2 may include any computing device known in the art").

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1,2, 8-11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrick (US Pub. No.20040181790 A1), in view of Matyas, Jr. et al. (US Patent No. 7,051,211 B1, hereinafter "Matyas").

#### 8. Per claim 1

#### Herrick discloses

A method for controlling program installation on a computing device, the method comprising: determining the configuration of an existing program that executes on the computing device ([0009] "The target computer may have an executable program thereon for automatically determining the currency of software installed on the target computer").

Determining the configuration of a new program that is to be installed on the computing device to replace the existing program ([0008] "The process may begin with the running of an executable program on the target network computer to determine whether the

Art Unit: 2191

configuration of at least one installed software package on the networked computer is current...").

- But Herrick does not disclose determining whether installation of the new program is authorized and preventing installation of the new program if installation is not authorized.
- However, Matyas discloses determining whether installation of the new program is authorized (col.6 lines 4-12 "The determination of whether the request is for an authorized installation of the software may be based on ...") and preventing installation of the new program if installation is not authorized (col.14 lines 39-43 "If the installation is not authorized, then the request is rejected.").
- Therefore, Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify teaching of Herrick with the teachings of Matyas to include determining whether installation of the new program is authorized and preventing installation of the new program if installation is not authorized in order to utilize computers equipped in a certain way to ensure that information is accessed and used in an authorized way (Matyas col.3 lines 3-5).

#### 9. Per claim 10

Herrick discloses

A System for controlling program installation, the system comprising: means for comparing a configuration of an existing operating system that executes on a computing device with a configuration of a new operating system that a user wishes to install on the computing device ([0009] "comparing the currency of the installed software to a desired

Art Unit: 2191

configuration list stored on the administrative computer, and obtaining installation software from a library server including necessary updates, upgrades and patches for installation on the target computer."& currency refers configurations mentioned in [0025]).

Page 6

- But Herrick does not disclose
   means for determining whether installation of the new operating system is authorized;
   and means for installing the new operating system if installation is authorized.
- However Matyas discloses

  Means for determining whether installation of the new operating system is authorized

  (col.6 lines 4-12 "The determination of whether the request is for an authorized

  installation of the software may be based on ...") and means for installing the new

  operating system if installation is authorized (col.13 lines 9-10 "... it is also determined if

  a user is authorized to install the software").
- The feature of providing determining whether installation of the new program is authorized would be obvious for the reasons set forth in the rejection of claim 1.

## 10. For claims 2 and 11

the rejection of claim 1 and 10 are incorporated respectively and further Herrick discloses determining the configuration of an existing program comprises determining at least one of a program type and version, and determining the configuration of a new program comprises determining at least one of a program type and version ([0026] "identify versions or configurations of installed software on a computer for which it is desired to

Application/Control Number: 10/812,220 Page 7

Art Unit: 2191

verify the currency of the installed software." & configuration of software implicitly included the software or program type).

#### 11. For claims 8 and 14

- the rejection of claim 1 and 10 are incorporated respectively and further Herrick discloses

  Comparing the existing program and the new program to determine whether they are of
  the same type ([0009] "comparing the currency of the installed software to a desired
  configuration list stored on the administrative computer, and obtaining installation
  software from a library server including necessary updates, upgrades and patches for
  installation on the target computer." & currency refers configurations mentioned in
  [0025]).
- But Herrick does not disclose
   Determining whether installation of the new program is authorized.
- However Matyas discloses

Determining whether installation of the new program is authorized (col.6 lines 4-12 "The determination of whether the request is for an authorized installation of the software may be based on ...").

 The feature of providing determining whether installation of the new program is authorized would be obvious for the reasons set forth in the rejection of claim 1.

## 12. Per claim 9

• the rejection of claim 1 is incorporated and further Herrick discloses

Art Unit: 2191

Comparing version information for the existing program and the new program ([0026] "Once versions or configurations have been identified the identified versions may be compared to an identified build level to determine compliance.").

Page 8

- But Herrick does not disclose
   Determining whether installation of the new program is authorized.
- However Matyas discloses
   Determining whether installation of the new program is authorized (col.6 lines 4-12 "The determination of whether the request is for an authorized installation of the software may be based on ...").
- The feature of providing determining whether installation of the new program is authorized would be obvious for the reasons set forth in the rejection of claim 1.
- 13. Claims 3-5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrick, in view of Matyas, and further view of Mullen.

## 14. Per claim 3

- the rejection of claim 1 is incorporated and Herrick and Matyas do not disclose determining the configuration of an existing program comprises determining the configuration of a program that is embedded in solid-state memory of the computing device.
- However Mullen discloses

Art Unit: 2191

Page 9

determining the configuration of an existing program comprises determining the configuration of a program that is embedded in solid-state memory of the computing device ([0019] "A service processor may include application programs to perform operations such as system monitoring and maintenance for the storage system in which the processor is embedded. " & [0031] "a computer readable medium, such as magnetic storage medium (e.g., hard disk drives, floppy disks, tape, etc.), optical storage (CD-ROMs, optical disks, etc.), volatile and non-volatile memory devices (e.g., EEPROMs, ROMs, PROMS, RAMS, DRAMS, SRAMs, firmware, programmable logic, etc.)" & reference to claim 4 of Mullen's invention).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine teachings of Herrick and Matyas and further include determining the configuration of an existing program comprises determining the configuration of a program that is embedded in solid-state memory of the computing device by the teachings of Mullen in order to implement the configuration of a program in the memory may further be accessible through a transmission media or from a file server over a network (Mullen, [0031] "Code in the computer readable medium is accessed and executed by a processor. The code in which described embodiments are implemented may further be accessible through a transmission media or from a file server over a network.")

## 15. Per claim 4

the rejection of claim 1 is incorporated and Herrick and Matyas do not disclose

determining the configuration of an existing program comprises determining the configuration of an operating system that is embedded in re-writable, solid-state memory of a terminal computer.

However Mullen discloses
 determining the configuration of an existing program comprises determining the

configuration of an operating system that is embedded in re-writable, solid-state memory

of a terminal computer (reject the same reason as claim 3 above).

The feature of providing determining the configuration of an existing program comprises determining the configuration of an operating system that is embedded in re-writable, solid-state memory of a terminal computer would be obvious for the reasons set forth in the rejection of claim 3.

#### 16. For claims 5 and 12

- the rejection of claim 1 and 10 are incorporated respectively and Herrick and Matyas do
  not disclose determining the configuration of an existing program comprises reading
  configuration information stored in a management interface of the computing device
- However Mullen discloses

determining the configuration of an existing program comprises reading configuration information stored in a management interface of the computing device ([0024] i.e. OS configuration setting and application configuration setting are stored in the file system. The file system which is resided in memory where the management interface is located).

Art Unit: 2191

The feature of providing determining the configuration of an existing program comprises reading configuration information stored in a management interface of the computing device would be obvious for the reasons set forth in the rejection of claim 3.

Page 11

17. Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herrick, in view of Matyas, in view of Delgado et al. (US Pub. No. 20050066324 A1, hereinafter "Delgado") and further view of Ahuje (US Patent No. 6,122,732).

#### 18. Per claim 6

- the rejection of claim 1 is incorporated and Herrick and Matyas do not disclose determining the configuration of an existing program comprises reading a program type and version from an original equipment manufacturer (OEM) string of a desktop management interface (DMI) of the computing device.
- However Delgado discloses

  determining the configuration of an existing program comprises reading a program type

  and version from an original equipment manufacturer (OEM) ([0044] "the storage media

  would include all the software necessary to install the retail and original equipment

  manufacturer (OEM) versions of a professional version, a home version, a student and

  teacher edition, and foreign language editions of the word processor application." &

  [0069] "different versions may include different type...").
- Therefore, it would have been obvious to a person of ordinary skill in the art at the time
   the invention was made to combine teachings of Herrick and Matyas and further include

Art Unit: 2191

determining the configuration of an existing program comprises reading a program type and version from an OEM by the teachings of Delgado in order to use OEM version expecting software to be installed by a computer reseller so it requests no information during installation. Typically, OEM version and retail version of software product have different installation behaviors (Delgado, [0003]).

Page 12

- Furthermore, Delgado does not disclose Comprising OEM string of a desktop management interface (DMI) of the computing device.
- However Ahuje discloses OEM string of a desktop management interface (DMI) (col.5 lines 1-3 & lines 20-25. Ahuje discloses the structure of flash ROM and relationship between OEM string and desktop management interface /system management basic input output system (DMI/SMBIOS)).
- Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine teachings of Herrick, Matyas, Delgado and further include comprising OEM string of a desktop management interface (DMI) of the computing device by the teachings of Ahuje in order to query management information format (MIF) database of a computer system and determine the software and hardware configuration of the system easily and quickly by system administrator using MIF and DMI/SMBIOS associated with OEM string. The MIF contains all information about the computer system and its component such as installation of the new software and hardware (col.1 lines 53-59).

Art Unit: 2191

19. Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrick, in view of Matyas and further view of Kadam et al. (US Pub. No. 20030079126 A1, hereinafter "Kadam").

Page 13

## 20. For claims 7 and 13

- the rejection of claim 1 and 10 are incorporated respectively and Herrick and Matyas do
  not disclose determining the configuration of a new program comprises reading
  configuration information from a header associated with the new program.
- However Kadam discloses determining the configuration of a new program comprises reading configuration information from a header associated with the new program ([0029] "Software installation package 302 includes self-extracting header, installation program, user credentials, and software binaries.").
- Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine teachings of Herrick and Matyas and further include determining the configuration of a new program comprises reading configuration information from a header associated with the new program by the teachings of Kadam in order to use the data and programs within software installation package (Kadam, [0030] "Self-extracting header includes executable computer code, which is used to uncompress data and programs within software installation package").

Art Unit: 2191

21. Claims 15,16,18,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrick, in view of Mullen, and further view of Matyas.

## 22. Per claim 15

#### Herrick discloses

A system stored on a computer-readable medium, the system comprising: logic configured to determine the type and version of an existing operating system ([0009] "The target computer may have an executable program thereon for automatically determining the currency of software installed on the target computer") and logic configured to determine the type and version of a new operating system that has been downloaded to the computing device ([0056] "once the command line processing has been completed, the update program may download a desired build list to allow comparison between the versions of the actual installations to be accomplished on the target computer").

- But Herrick does not disclose
   Logic configuration embedded in memory of a computing device.
- However Mullen discloses

Logic configuration embedded in memory of a computing device ([0019] "A service processor may include application programs to perform operations such as system monitoring and maintenance for the storage system in which the processor is embedded." & [0031] "a computer readable medium, such as magnetic storage medium (e.g., hard disk drives, floppy disks, tape, etc.), optical storage (CD-ROMs, optical disks, etc.),

Art Unit: 2191

volatile and non-volatile memory devices (e.g., EEPROMs, ROMs, PROMS, RAMS, DRAMS, SRAMs, firmware, programmable logic, etc.)" & reference to claim 4 of Mullen's invention).

- The feature of providing Logic configuration embedded in memory of a computing device would be obvious for the reasons set forth in the rejection of claim 3.
- Furthermore, both Herrick and Mullen do not disclose
   logic configured to determine whether installation of the new program is authorized.
- However, Matyas discloses

  logic configured to determine whether installation of the new program is authorized

  (col.6 lines 4-12 "The determination of whether the request is for an authorized installation of the software may be based on ...").
- Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify teachings of Herrick and Mullen and further include logic configured to determine whether installation of the new program is authorized by teaching of Matyas in order to utilize computers equipped in a certain way to ensure that information is accessed and used in an authorized way (Matyas col.3 lines 3-5).

#### 23. Per claim 16

the rejection of claim 15 is incorporated and Herrick and Matyas do not disclose logic configured to determine the type and version of an existing operating system comprises logic configured to read configuration information stored in a management interface of the computing device.

Art Unit: 2191

However Mullen discloses

logic configured to determine the type and version of an existing operating system comprises logic configured to read configuration information stored in a management interface of the computing device ([0024] i.e. OS configuration setting and application configuration setting are stored in the file system. The file system which is resided in memory where the management interface is located).

Page 16

• The feature of providing logic configured to determine the type and version of an existing operating system comprises logic configured to read configuration information stored in a management interface of the computing device would be obvious for the reasons set forth in the rejection of claim 3.

#### 24. Per claim 18

- the rejection of claim 15 is incorporated and further, Herrick discloses logic configured to compare the type of the existing operating system with the type of the new operating system ([0009] "comparing the currency of the installed software to a desired configuration list stored on the administrative computer, and obtaining installation software from a library server including necessary updates, upgrades and patches for installation on the target computer." & currency refers configurations mentioned in [0025]).
- But Herrick does not disclose
   logic configured to determine whether installation of the new operating system is authorized.

Art Unit: 2191

However Matyas discloses

logic configured to determine whether installation of the new operating system is

authorized.

• Therefore, Therefore, it would have been obvious to a person of ordinary skill in the art at

Page 17

the time the invention was made to modify teaching of Herrick with the teachings of

Matyas to include determining whether installation of the new program is authorized and

preventing installation of the new program if installation is not authorized in order to

utilize computers equipped in a certain way to ensure that information is accessed and

used in an authorized way (Matyas col.3 lines 3-5).

25. Per claim 19

the rejection of claim 15 is incorporated and further, Herrick discloses

logic configured to install the new operating system and replace the existing operating

system ([0008] "The process may begin with the running of an executable program on

the target network computer to determine whether the configuration of at least one

installed software package on the networked computer is current...").

But Herrick does not disclose

When installation is authorized ...

However Matyas discloses

When installation is authorized ...(col.6 lines 4-12 "The determination of whether the

request is for an authorized installation of the software may be based on ...").

Art Unit: 2191

Therefore, Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify teaching of Herrick with the teachings of Matyas to include "When installation is authorized..." in order to utilize computers equipped in a certain way to ensure that information is accessed and used in an authorized way (Matyas col.3 lines 3-5).

Page 18

- 26. Claims 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herrick, in view of Mullen, Matyas and further view of Kadam.
  - the rejection of claim 15 is incorporated and further, Herrick, Mullen and Matyas do not disclose the logic configured to determine the type and version of a new operating system comprises logic Configured to read configuration information from a header associated with the new operating system.
  - But Kadam discloses the logic configured to determine the type and version of a new operating system comprises logic Configured to read configuration information from a header associated with the new operating system ([0029] "Software installation package 302 includes self-extracting header, installation program, user credentials, and software binaries.").
  - Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine teachings of Herrick and Matyas and further include determining the configuration of a new program comprises reading configuration information from a header associated with the new program by the teachings of Kadam in

Art Unit: 2191

order to use the data and programs within software installation package (Kadam, [0030] "Self-extracting header includes executable computer code, which is used to uncompress data and programs within software installation package").

27. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mullen, in view of Delgado and further view of Ahuje.

#### Per claim 22 28.

- the rejection of claim 20 is incorporated and further, Mullen does not disclose the management interface comprises a desktop management interface (DMI) and the configuration information is stored in an original equipment manufacturer (OEM) string contained within the DMI.
- However Delgado discloses configuration information is stored in an original equipment manufacturer (OEM) ([0044] "the storage media would include all the software necessary to install the retail and original equipment manufacturer (OEM) versions of a professional version, a home version, a student and teacher edition, and foreign language editions of the word processor application." & [0069] "different versions may include different type...").
- Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify teaching of Mullen with the teachings of Delgado to include configuration information is stored in an original equipment manufacturer (OEM) in order to use OEM version expecting software to be installed by a computer reseller so

Application/Control Number: 10/812,220 Page 20

Art Unit: 2191

it requests no information during installation. Typically, OEM version and retail version of software product have different installation behaviors (Delgado, [0003]).

- Furthermore Delgado does not disclose
   the management interface comprises a desktop management interface (DMI) and OEM
   string contained within the DMI.
- However Ahuje discloses
   the management interface comprises a desktop management interface (DMI) and OEM
   string contained within the DMI (col.5 lines 1-3 & lines 20-25).
- Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine teachings of Mullen and Delgado and further include comprising the management interface comprises a desktop management interface (DMI) and OEM string contained within the DMI by the teachings of Ahuje in order to query management information format (MIF) database of a computer system and determine the software and hardware configuration of the system easily and quickly by system administrator using MIF and DMI/SMBIOS associated with OEM string. The MIF contains all information about the computer system and its component such as installation of the new software and hardware (col.1 lines 53-59).

Application/Control Number: 10/812,220 Page 21

Art Unit: 2191

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Junchun Wu whose telephone number is 571-270-1250. The examiner can normally be reached on 8:00-17:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Junchun Wu

WEI ZHEN
SUPERVISORY PATENT EXAMINER